# Abdallah Moussa

A dedicated tech explorer on a perpetual journey of innovation, embracing every project as a chance to make a difference.

Cairo, Egypt (+2) - 01124463623 a.moussa6466@gmail.com

#### **EXPERIENCE**

## **Neuss**, Irbid, Jordan — Remote Software Engineer

October 2022 - November 2023

- Developed a comprehensive time tracking app, incorporating
   User Authentication and Account Management for employees to record their activity and achievements using Flutter.
- Implemented real-time chatting functionality to facilitate seamless communication among users using Flutter.
- Created backend logic for User Authentication and Account Management using FastAPI.
- Optimized projects through dockerization, enabling remote deployment of machine learning models for enhanced efficiency and accessibility.
- Adapted Tasmota firmware for easy ESP board connections, configuration, data collection from sensors, and efficient data transmission to InfluxDB and Grafana via Telegraf.
- Applied machine learning techniques, primarily with PyTorch, for IoT data analysis, expanding the company's AI-IoT capabilities.
- Fine-tuned the Whisper model using deep learning techniques, resulting in the development of sophisticated dialogue systems catering to various Arabic dialects.

## **EDUCATION**

# German University in Cairo

# B.Sc. Computer Engineering GPA: 2.49

October 2014 - February 2024. (2016 gap year - personal projects)
Studied Mechatronics initially, then switched to Computer Engineering.

# Social Companion Robot - Bachelor Thesis

- **Computer Vision:** Implemented face, emotion, object and color recognition, image captioning.
- NLP: Developed a conversational chatbot using PyTorch, integrated with a customized chatbot for versatile user interactions.
- Speech-to-text and Text-to-speech engines.

#### **SKILLS**

Programming Languages: Python, Java, JavaScript, Dart

Frameworks: Django, FastAPI, Flask, Flutter, MERN stack

PostgreSQL, MongoDB

RESTful API

AI/ML: CV, NLP, PyTorch

IoT: Tasmota firmware, ESP boards, InfluxDB, Grafana, Telegraf

Unity

Docker, Github

Linux

## **Relative Coursework**

Artificial Intelligence

Machine learning

Computer Vision

Deep learning in Computer

Vision

**Human Computer Interaction** 

**Business of Software** 

Computer & Network Security

## Languages

Arabic: Native

**English: Proficient** 

German: Beginner